

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Generic Aqueous Roof Mastic Formulation Type 1 Sample Name: **ARM-91-1**
ARM-2885-1
ARM-3640-1A

Product Code : NONE MSDS Date : 05/14/98

Key : 885558-0

Italics denote a revision from previous MSDS.

COMPANY IDENTIFICATION	EMERGENCY TELEPHONE NUMBERS
Rohm and Haas Company 100 Independence Mall West Philadelphia, Pa 19106-2399	HEALTH EMERGENCY : 215-592-3000 SPILL EMERGENCY : 215-592-3000 CHEMTREC : 800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

No		CAS REG NO	WEIGHT (%)
1	<i>Acrylic polymer</i>	<i>Not Hazardous</i>	<i>144.8 MIN</i>
2	<i>Titanium dioxide</i>	<i>13463-67-7</i>	<i>1</i>
3	<i>Calcium carbonate</i>	<i>1317-65-3</i>	<i>1</i>
4	<i>Fused silica</i>	<i>60676-86-0</i>	<i>1</i>
5	<i>Silicates</i>	<i>Mixture</i>	<i>1</i>
6	<i>Ethylene glycol</i>	<i>107-21-1</i>	<i>10.0 MAX</i>
7	<i>Water</i>	<i>7732-18-5</i>	<i>45.0 MAX</i>
8	<i>Ammonia</i>	<i>7664-41-7</i>	<i>00.1 MAX</i>
9	<i>Residual monomer(s)</i>	<i>Not Required</i>	<i>00.1 MAX</i>

NOTE: The -|-, or -Bar-, in the WEIGHT (%) column is used to denote two or more components whose weight percents sum to the total shown by the figure either to the right of or immediately above the -Bar-.

See Section 8, Exposure Controls / Personal Protection

3. HAZARDS IDENTIFICATION

Primary Routes of Exposure

Inhalation
Skin Contact
Eye Contact

Inhalation

Inhalation of vapor or mist can cause the following:
- irritation of nose, throat, and lungs - headache - nausea

Eye Contact

Material can cause the following:
- moderate irritation

Skin Contact

Prolonged or repeated skin contact can cause the following:
- irritation if not promptly washed from skin

Ingestion

Material is possibly harmful if swallowed.
The solvent(s) in this material can cause the following:
- nausea - vomiting - diarrhea - gastrointestinal irritation - kidney damage

Delayed Effects

Overexposure to the solvent(s) in this product can cause the following: - liver damage - kidney damage - adverse reproductive effects - embryofetotoxic effects - central nervous system (CNS) effects

4. FIRST AID MEASURES

Inhalation

Move subject to fresh air.

Eye Contact

Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.

Skin Contact

Remove contaminated clothing. Wash affected skin areas thoroughly with soap and water. Consult a physician if irritation persists. Wash contaminated clothing thoroughly before reuse. Do not take clothing home to be laundered.

Ingestion

If swallowed, give 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Consult a physician.

Note to Physician

Ethylene glycol is moderately toxic by ingestion. Systemic effects include possible liver and kidney damage. If swallowed, immediate evacuation of the stomach is advisable. Ethanol is an antidote. Its early administration may block the formation of nephrotoxic metabolites of ethylene glycol in the liver. Ethanol should be given orally first in a 50% solution, then in a 20% solution. Hemodialysis is necessary.

5. FIRE FIGHTING MEASURES

Flash Point	Noncombustible
Auto-ignition Temperature	Not Applicable
Lower Explosive Limit	Not Applicable
Upper Explosive Limit	Not Applicable

Unusual Hazards

Material can splatter above 100 C/212 F. Dried product can burn.

Extinguishing Agents

Use extinguishing media appropriate for surrounding fire.

Personal Protective Equipment

As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

Special Procedures

Use water spray to cool containers exposed to fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection

Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

Procedures

Keep spectators away. Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

Storage Conditions

The minimum recommended storage temperature for this material is 1 C/34 F. The maximum recommended storage temperature for this material is 60 C/140 F. Keep from freezing; material may coagulate.

Do not store this material near food, feed or drinking water.

Handling Procedures

Do not handle material near food, feed or drinking water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit Information

No		CAS REG NO	WEIGHT (%)
1	Acrylic polymer	Not Hazardous	144.8 MIN
2	Titanium dioxide	13463-67-7	1
3	Calcium carbonate	1317-65-3	1
4	Fused silica	60676-86-0	1
5	Silicates	Mixture	1
6	Ethylene glycol	107-21-1	10.0 MAX
7	Water	7732-18-5	45.0 MAX
8	Ammonia	7664-41-7	00.1 MAX
9	Residual monomer(s)	Not Required	00.1 MAX

Comp.		ROHM AND HAAS		OSHA		ACGIH	
No.	Units	TWA	STEL	TWA	STEL	TWA	STEL
1		None	None	None	None	None	None
2	mg/m ³	2 a	10	10 b	None	10 b	None
3	mg/m ³	10 b	20	5 a	None	10 b	None
4	mg/m ³	0.1 a	None	0.1 a	None	0.1 a	None
5		None	None	None	None	None	None
6	mg/m ³	20 Skin	60 Skin	120 c	None	100 c	None
7		None	None	None	None	None	None
8	ppm	25	35	None	35	25	35
9		None	None	None	None	None	None

a Respirable Fraction

b Total Dust

c Ceiling

Respiratory Protection

None required if airborne concentrations are maintained below the exposure limit listed in 'Exposure Limit Information'. A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Up to 1000 ppm organic vapor: Wear a MSHA/NIOSH approved (or equivalent) half-mask, air-purifying respirator.

Above 1000 ppm organic vapor or Unknown: Wear a MSHA/NIOSH approved (or equivalent) self-contained breathing apparatus in the positive pressure mode,
OR,

MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency

escape provisions.

Air-purifying respirators should be equipped with an ammonia/methylamine cartridge. Air-purifying respirators should be equipped with MSHA/NIOSH approved (or equivalent) cartridges for protection against organic vapors and filters for protection against dusts and mists.

Eye Protection

Use chemical splash goggles (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

Hand Protection

Chemical-resistant gloves should be worn whenever this material is handled.

The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection:

- Nitrile
- Polyvinyl chloride
- Neoprene

Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

Rinse and remove gloves immediately after use. Wash hands with soap and water.

Engineering Controls (Ventilation)

Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of **Industrial Ventilation: A Manual of Recommended Practice** published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Other Protective Equipment

Facilities storing or utilizing this material should be equipped with an eyewash facility.

9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Appearance</i>	<i>Milky</i>
<i>Color</i>	<i>White to tan</i>
<i>State</i>	<i>Liquid</i>
<i>Odor Characteristic</i>	<i>Ammonia odor</i>
<i>Viscosity</i>	<i>Variable</i>
<i>Specific Gravity (Water = 1)</i>	<i>> 1</i>
<i>Vapor Density (Air = 1)</i>	<i>> 1</i>
<i>Vapor Pressure</i>	<i>17 mm Hg @ 20°C/68°F Water</i>

Melting Point	Variable
Boiling Point	Variable
Solubility in Water	Dilutable
Percent Volatility	45% Maximum
Evaporation Rate (BAc = 1)	< 1

See Section 5, Fire Fighting Measures

10. STABILITY AND REACTIVITY

Instability

This material is considered stable.

Hazardous Decomposition Products

Thermal decomposition may yield the following:

- acrylic monomers

Hazardous Polymerization

Product will not undergo polymerization.

Incompatibility

There are no known materials which are incompatible with this product.

11. TOXICOLOGICAL INFORMATION

Acute Data

No toxicity data are available for this material.

The information shown in SECTION 3, Hazards Identification, is based on toxicity profiles of similar materials or on the components present in this material.

12. ECOLOGICAL INFORMATION

No Applicable Data

13. DISPOSAL CONSIDERATIONS

Procedure

Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

US DOT Hazard Class

NONREGULATED

15. REGULATORY INFORMATION

Workplace Classification

This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS).

SARA TITLE 3: Section 311/312 Categorizations (40CFR 370)

This product is a hazardous chemical under 29CFR 1910.1200, and is categorized as an immediate and delayed health hazard.

SARA TITLE 3: Section 313 Information (40CFR 372)

This product contains a chemical which is listed in Section 313 at or above **de minimis** concentrations. The following listed chemicals are present: (Quantity present is found elsewhere on this MSDS.)

- Ethylene glycol (107-21-1)

CERCLA Information (40CFR 302.4)

Releases of this material to air, land, or water are not reportable to the National Response Center under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or to state and local emergency planning committees under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304.

Waste Classification

When a decision is made to discard this material as supplied, it is classified as a RCRA non-hazardous waste.

Pennsylvania

Any material listed as -Not Hazardous- in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

16. OTHER INFORMATION

Rohm and Haas Hazard Rating		Scale
Toxicity	1	4=EXTREME
Fire	0	3=HIGH
Reactivity	0	2=MODERATE
Special	-	1=SLIGHT
		0=INSIGNIFICANT

Ratings are based on Rohm and Haas guidelines,
and are intended for internal use.

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ABBREVIATIONS:

ACGIH = American Conference of Governmental Industrial Hygienists
OSHA = Occupational Safety and Health Administration
TLV = Threshold Limit Value
PEL = Permissible Exposure Limit
TWA = Time Weighted Average
STEL = Short-Term Exposure Limit
BAc = Butyl acetate
Italics denote a revision from previous MSDS in this area.

The information contained herein relates only to the specific material identified. Rohm and Haas Company believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, expressed or implied, is made as to the accuracy, reliability, or completeness of the information. Rohm and Haas Company urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.